HENRY W. ROBY'S STORY OF THE INVENTION OF THE TYPEWRITER

EDITED WITH HISTORICAL INTRODUCTION BY

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Historical Introduction

FOREST HOME Cemery, in Milwaukee, is an unmarked grave, the lot which contains it identified only by the corner markers which indicate its boundaries. The passing visitor obtains no slightest clue to the identity of the occupant, yet this humble spot marks the last resting place of one of Wisconsin's greatest sons, Christopher Latham Sholes, the inventor of the typewriter.¹

If one were to essay the task of designating the characteristic which most sharply distinguishes the present

¹Since the foregoing lines were written a monument to Sholes has been erected by the National Shorthand Reporters' Association.

age in America from all of its predecessors in the history of civilization, he would probably find the answer in the degree to which it employs mechanical devices to lighten human labor and multiply human resources. High in the roll of such devices stands the typewriter, which has freed the world from its age-long dependence upon the slow-moving pen in the work of recording ideas. The art of writing is one of the most ancient achievements of civilized man, yet for upwards of two thousand years, prior to the epochal work of Sholes, it had undergone no material development. By that work all mankind has been forever freed from the slow drudgery of penmanship and a veritable revolution has been wrought, not merely in the business world, but, in the conduct of uncounted diverse and far-reaching activities of mankind.

Those hopeful advocates of universal peace who in recent years have labored to banish warfare from the earth may ponder with profit the story of the invention of the typewriter. For the most part it is a story but little known, for the simple reason that until a very recent date no one has thought it worth his while to incur the labor of assembling the facts and committing them to type. Yet the story concerns one of the great achievements of American invention, a veritable triumph of civilization wrought out through weary years of patient toil and high endeavor. Contrast for a moment the public indifference and neglect manifested toward this soldier of peace with the instant recognition and applause accorded the doer of a brilliant exploit in the field of military combat. To the battle of Lake Erie or King's Mountain or Bull Run volumes are

devoted, while our military leaders and heroes are immortalized in our school histories and their names are given to cities, counties, and schools throughout the land; nor does the present writer deprecate such generous recognition, for, despite the current fashion of thought, he is disposed to believe that the future holds yet other wars in store and that those who venture their lives in the defense of their country are worthy of all possible recognition and honor.

Quite compatible with this belief, however, is the conviction that brilliant achievement in the realm of civil endeavor is likewise worthy of public recognition and gratitude. The late Professor William James, one of America's greatest thinkers, was wont to argue that if war were to be banished from the world men must find in the activities of peaceful life some moral

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equivalent for its dangers and discipline and its incitements to the ambitious and the daring. Anyone who breads the narrative contained in the pages which follow will hardly deny that to Sholes and Roby, Densmore and the rest who figure in its pages, such equivalent was not lacking. Nor will the ardent pacifist deny, probably, that his cause would be powerfully promoted if such brilliant toilers in the fields of peace could be assured of public recognition comparable to that customarily accorded our victors in war.

Of the life of Christopher Latham Sholes, whose name justly takes rank with those of Fulton and Whitney and Morse and Howe on the roll of American inventors, the leading facts are sufficiently known, but of the struggles whereby he achieved his great invention, almost nothing of first-hand in-

formation has been recorded. All of the little band of workers in the humble Milwaukee machine shop where the typewriter was created are long since dead. With the exception we are presently to peruse, none of them, so far as known, left any record of the years of struggle during which the invention was wrought out. The narrative of Dr. Roby, therefore, will always remain unique. He was a man of culture and education and was imbued with a passionate sense of lovalty to his chief. Intimately associated with Sholes in the work of invention, he has recorded the story of the early years of mingled triumph and disaster with praiseworthy fidelity and detail, a story which, but for his telling, would have been forever lost to the world. Of the later years, when the machine had been taken over by the Remingtons, others can speak with better authority, and, wisely, Dr.

Roby concludes his story at this point. The great firm with whose name, from the year 1873 onward, the destiny of the typewriter was to be so prominently identified has adequately cared for the story of these later years. the Remingtons took over the typewriter as a workable and substantially perfected machine: of the toils and struggles of the six-year period from 1867 to 1873 when that machine was being evolved by Sholes and his little band of co-workers they knew nothing, and it is precisely this period of struggle which the publication of Dr. Roby's hitherto unknown narrative now brings to our knowledge.

Christopher Latham Sholes was born at Mooresburg, Columbia County, Pennsylvania, February 14, 1819. He was of purest New England lineage, being a direct descendant of John Alden, who figures so prominently in

Longfellow's story of the courtship of valiant Miles Standish. Several of his ancestral relatives lost their lives in the Revolutionary War, and his father served in the War of 1812. In December, 1832, young Sholes, not yet fourteen years of age, was apprenticed to Valentine Best, publisher of the Danville Intelligencer, until he should reach the age of eighteen. With his employer he found a pleasant home, and from him learned the trade which was his lifetime profession until he was lured from it by his inventive proclivities.

An elder brother, Charles C. Sholes, had removed to Green Bay in 1836, where he gained control of a newspaper and soon became active in political and public life. Thither Christopher followed on the conclusion of his apprenticeship, and from May, 1837, until his death in February, 1890, Wis-

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C. Sholes acquired an interest in the Madison Enquirer, and before long we find the younger brother at the infant capital, serving alternately on this paper and as journal clerk of the legislature. In 1839 he became editor of the Telegraph at Southport-now Kenosha-which is still conducted under its original name. To the early press of Wisconsin politics was as the breath of life, and, although by temperament Sholes would seem to have been but poorly equipped for public life, for over a quarter of a century he mingled the avocation of politician with his regular calling of a journalist, serving a number of years in the territorial and (later) state legislature, holding the office of postmaster at Kenosha and Milwaukee, and serving as Collector of Customs and member of the Board of Public Affairs of the latter city. Keno-

sha continued to be his home until shortly before the Civil War when he removed to Milwaukee, where he served for several years (successively) as editor of the News and the Sentinel. From the latter position he went to the collectorship, an appointment from President Lincoln, and during this incumbency he turned his attention to the invention of a writing machine, which absorbed his energies for the remainder of his active life.

There are but two existing accounts of the invention of the typewriter, both of them published in recent years, which call for any attention here. One

of the invention of the typewriter, both of them published in recent years, which call for any attention here. One is a booklet printed in 1921 by Charles E. Weller of La Porte, Indiana, relating his knowledge of the invention. The other is a larger and more comprehensive narrative, issued by the Herkimer County (N. Y.) Historical Society in 1923 with the title, *The Story*

of the Typewriter, 1873-1923. Both are valuable records, yet neither supplies the place of Dr. Roby's narrative. Weller, like Roby, was a friend and admirer of Sholes. Roby seems to have been impelled to write out his story through indignation over a newspaper attempt to rob Sholes, years after his death, of the credit justly due him for his invention. Weller's story was put into print with the equally laudable motive of raising money by its sale to be devoted to the erection of a monument to Sholes' memory. Weller was a stenographer and telegrapher whose aid Sholes enlisted in testing his machines in a practical way during the years he was laboring to perfect the invention. Although he was absent from Milwaukee (in St. Louis) during practically all of this period and had nothing to do with the work of invention, his narrative sheds interesting light upon it and comprises the only effort which has hitherto been made to preserve in print the facts concerning the invention of the typewriter. The Story of the Typewriter, which may be regarded as, in effect, the narrative of the Remington Company, relies chiefly upon Weller's story for the years prior to 1873, and, for the rest, provides an entertaining sketch of the development of Sholes' invention from the spring of that year, when the Remingtons first became interested in it, until the present time.

Dr. Roby's narrative, written by one who was a daily participant in Sholes' labors during the years prior to 1873, depicts, with an intimacy of knowledge which can never be rivaled, the steps by which the invention was worked out and the strongly contrasting personalities of the chief figures in the enterprise.

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Of Dr. Henry W. Roby, the friend and associate of Sholes, and whose name is not even mentioned in any existing account of the typewriter which I have been able to find, it is proper that something should be said.2 Born in Morrow County, Ohio, July 20, 1842, he came with his parents four years later to Walworth County, Wisconsin. He followed his parents in several subsequent removals, gaining such schooling as he might at the several country schools of the communities in which he lived until, at the age of seventeen, he "bought his time" from his father and began life on his own account. In the three following years he succeeded in gaining a good academic education, and in August, 1862, at the age of twenty,

² For the information which follows I am indebted to Mr. William E. Connelley, secretary of the Kansas Historical Society, and a friend and neighbor of Dr. Roby during his later years.

enlisted in the Twenty-Second Wisconsin Infantry where he served until September, 1865. During this time he spent practically a year (March, 1863, to April, 1864,) as an inmate of the noted Libby Prison at Richmond. Young Roby turned the years of his

army career to good account by studying and thoroughly mastering the art of phonetic shorthand as it was then practiced. On leaving the army he turned his newly-acquired talent to use by becoming a teacher of shorthand in the Bryant and Stratton Commercial College during the winter of 1865-66. A year later the state legislature created the office of court reporter in the various courts of the state and Roby won, by competitive examination, the appointment as Phonographic Court Reporter for Milwaukee and Kenosha Counties. He held this position from 1867 to 1876, reporting,

with the aid of those under him, the proceedings of sixteen courts, and becoming, meanwhile, a recognized authority on shorthand and methods of court reporting.

It was while engaged as Court Reporter that Roby became acquainted with Sholes. Roby was himself something of a mechanical genius, his office adjoined that of Sholes, and common tastes and interests drew the men together. "The attachment of Roby and Sholes," writes William E. Connelley, "was closer than that between any of the others. There was more in common with them. Roby took a financial interest in Sholes' typewriter and he studied the plans and models closely. He made suggestions, some of which Sholes adopted and others which the manufacturers later adopted, but Roby never claimed any part of the idea of the writing machine, always insisting that the honor belonged to Mr. Sholes alone. When the final crisis came, that of getting a financially responsible firm to manufacture the machine in commercial quantities, Roby generously sacrificed his financial share that the arrangement might be made; but he had been of great help in the matter, and there is reason to doubt that the machine would have been developed but for the aid he was able to give."

The life ambition of Roby, however, was to become a physician and surgeon, and in 1876 he entered Rush Medical College at Chicago. Graduating the following year, he practiced medicine in that city until 1879, when he removed to Topeka, Kansas, which continued to be his home until his death, August 22, 1920. Here he attained a well-earned reputation as an accomplished physician. "As a citizen none stood higher, nor was held in greater

esteem. He was foremost in promoting the interests of the city. In the social and literary activities of Topeka he was always in the front rank. He was the founder of the Saturday Night Club, which has been a force in Topeka for more than thirty-five years. He also founded the Kansas Authors Club, yet in existence and actively at work in Kansas."

The invention of the typewriter is peculiarly a Wisconsin story. Sholes and Densmore, two of its chief figures, were both pioneer Wisconsin journalists, and Roby, another, was a citizen of the state from the early age of four. Of the careers of Sholes and Roby we have already taken note. Densmore founded, and for several years published, the True Democrat, the first paper printed at Oshkosh. For a time he was associated with Sholes in publishing the Kenosha Telegram and at

different periods he was engaged in journalism at Milwaukee and Elkhorn. In 1862 he was attracted to Pennsylvania by the oil business, then newly developing. Here he remained until the spring of 1868, when, in response to the call of his former colleague, he returned to Milwaukee to identify his life henceforth with the development of the typewriter. Soulé, Glidden and Schwalbach, who also figure in the story, were likewise all Wisconsin men and Milwaukee, the state's chief city, was the scene of their labors. It seems peculiarly fitting, therefore, that Dr. Roby's narrative should be edited by a Wisconsin citizen and given to the world by a Wisconsin publishing house. Still more fitting would it be if the publication of this story should prove instrumental in arousing the citizens of Wisconsin to demand that the great commonwealth to which they belong

pay itself the belated honor of erecting a suitable monument over the unmarked grave of Christopher Latham Sholes in Forest Home Cemetery, instead of leaving the task to be performed by men and women from other states.

It remains to discharge the pleasant task of publicly acknowledging my indebtedness to the widow of Dr. Roby for her generosity in placing her husband's manuscript unreservedly at my disposal, and to my friend, William E. Concelley, veteran secretary of the Kansas Historical Society, for apprising me of its existence and for his exertions in making it accessible to me. It is a pleasure, also, to acknowledge the courtesy of Mr. John W. Vrooman, President of the Herkimer County Historical Society, in generously placing at my disposal several photographs from that



THE BIRTHPLACE OF THE TYPEWRITER Kleinsteuber's machine shop in Milwaukee.

society's interesting publication, The Story of the Typewriter, 1873-1923.

Madison, Wis. MILO M. QUAIFE.

Chapter I

The Invention of the Typewriter



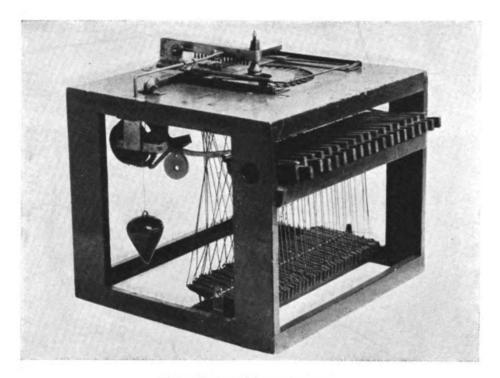
GREAT want in the world will always summon the genius of the planet to its fulfillment, and the cry of

"Eureka!" goes up in many places.

When the world had cried for a thousand years for a wider look over our great wheeling orb, Montgolfier, in his balloon, answered "Aye!" from the clouds a mile above the Celtic plains. When it became apparent that coaches and sails were too slow for the race, Fulton and Stephenson answered the roll call with the screech of the steam engine.

When the "Song of the Shirt" drummed into the dull ears of humanity its deathless refrain of

> Stitch, stitch, stitch, Work, work, work,



THE FIRST TYPEWRITER

Sholes' first patent was granted June 23, 1868. The model shown here (now in the Smithsonian Institution) was patented twenty-one days later.

the roll was again called and Elias Howe responded "Aye!" to the summons of the race with the sewing machine. When steam became too slow and cumbersome for the bearing of messages from city to city, the roll was again called and Morse answered with the electric telegram: "What hath God wrought?" And when later the call of the nations rang out from distant shores, Cyrus Field answered the call through the rolling deep, three thousand miles away, "Thank God, the cable is laid."

When telegraphy became in turn too slow and burdensome, Bell and Edison responded by telephone to the call of their kind, and when it was found that, as old Horace had said, Nescit vox reverti, (the spoken voice never returns) Edison, stooping over a new device, almost fell in a faint at hearing an inanimate piece of mechanism fling

back into his startled ears his own "Hello!" from the phonograph.

And now, when it is found that the laying of wires over land and under sea is far too slow and costly for the state of human progress, Marconi speaks from the mountain top, like echoes hurled from crag to crag, with wireless telegraphy,

And speaks to ships upon the sea, As far from shore as ships can be.

And when all the world began to clamor for a speedier means of impounding thought, Isaac Pitman, in England, and C. L. Sholes, in Wisconsin, flashed the pen and clicked the keys in quick response. The Briton gave the practical system of reporting speech and the Yankee gave the rapid reproduction of it, and each has blessed the race with an incommensurate boon. They added wings to the car of progress and gave it a magnificent

flight, and we gain a very poor conception of it all when we put down in cold Arabic figures, so many young men and women added to the industries of the world. It means more than that. It means untold millions of dollars added to our wealth and inestimable comforts added to the sum of human happiness and well-being. It means an advantage to all men that arithmetic cannot sum up; and when we think of the proud share that Milwaukee bore in the initiation and development of it all, what a proud city she ought to be.

In the midst of one of her busiest marts ought to stand a magnificent statue of Christopher Latham Sholes, her most honored citizen,

> For he it was who first of all Wrought out his dream with patient hand, And left the boon of labor saved To bless mankind in every land.

Inception of the Typewriter

Within the historic precincts of the Cream City lived the man whose genius gave the world the inestimable blessing of the typewriter. Though now claimed by seven wrangling cities, yet, like the immortal Homer, his influence is destined to become coextensive with the human race.

The typewriter that wrote and kept on writing, doing better and better work from its inception to the present hour, is the sacred gift of Christopher Latham Sholes to his fellow men, and that gift, first known as the "Sholes" and then as the "Sholes-Glidden" and later as the "Remington" typewriter, was the pioneer machine, which set going one of the most beneficent evolutions ever accomplished in the literary and business world. Only the printing press and the steam engine excel it in

the magnitude of their benefactions to all men.

Some men are found who live for wealth And some, also, for power and show; Some live to leave a name behind And some to reap where others sow. Some live with naught of cultured ease Through all their long and tolisome years, That those who follow crowding on May scant their toil and spare their tears. They are the few unselfish souls Who all their lives have firectly wrought That in the coming years they may Enrich the world with minted thought.

Such a man was C. Latham Sholes. It was my good fortune to be a neighbor of his from 1865 to 1875 and we had contiguous offices in the Young Block in Milwaukee for several years.

Mr. Sholes was an enthusiastic philanthropist who dreamed unceasingly of benefactions to the race and struggled to lift all men to a higher plane of excellence. He often told me that he could die contented and happy if he could but lift some great burden from the shoulders of all men, and, in a

degree, he did just that. He made it possible for all mankind to put off a part of the burden of laborious writing and scant the tortures of its tyranny. Mr. Sholes had already learned the phonetic system of writing and print-

ing and when I opened a school of shorthand in the Commercial College he was one of the first to give me welcome and encouragement. He could not write fast enough to report but he understood the principles and promises of stenography far better than most men.

During the early days of our ac-

quaintance, having been a printer and publisher and knowing the need of it, and having already invented the mailing machine used in printing offices, he invented and constructed a machine for paging blank ledgers and other books. It was while working on that machine that he became wrapped up

in the idea of a typewriter. He was a wide-range reader both in science and history and knew generally what other men had done in the line of his dreaming. I have read somewhere that Mr. Sholes obtained his first suggestion of a typewriter from Mr. Carlos Glidden but I am quite sure the statement is incorrect. I knew both men well. I had invented and was working on a magician's clock in the shop of Mr. Kleinsteuber where Mr. Sholes was making his paging machine and where. also, Mr. Glidden was making a spading machine by which he hoped to supplant the plow in farming. Mr. Samuel W. Soulé, another neighbor, was interested with Mr. Sholes in the paging machine and the patent on it and was often in the shop with us. One day when we were all four in the shop together working on our favorite hobbies, there came an hour of mutual

weariness in our work when we all. together with Mr. Kleinsteuber, the owner of the shop, and Matthias Schwalbach, the pattern maker, stood by Mr. Sholes' bench listening to one of his brilliant outbursts on the history and hardships of invention. During that conversation he told us that he hoped for a better fate for his paging machine than had befallen Eli Whitney and his cotton gin, then he said that about the greatest need of the world was a writing machine. Mr. Glidden broke in with the inquiry, "Mr. Sholes, why can't you make a machine that will print words as well as figures? If you can make a paging machine, you ought to make a writing machine." Mr. Sholes replied, "I can. I have thought about it a great deal and I am going to try it as soon as I get through with this paging machine." He told us of several attempts that others had

made in the last two hundred years to make a writing machine but all had failed; and yet, he said, he felt sure he could make a machine a success About a week or so after that he came into my office and said, "I'm in two states of mind to-day, in the dumps and on the mountain top. Last night I had a cough that kept me awake nearly all night and tired me out but I spent the time in working out the writing machine that I have been so long dreaming about. It has puzzled me a long time, but I think I have the right idea at last." He described the machine to me and that day we both set to work making wooden models of some parts of it.

The following Monday we were all in the shop again at our work. The paging machine was so far along that it did not require all Mr. Sholes' time and that day we made a start on the writing machine. Mr. Schwalbach, the pattern maker, was consulted and when Mr. Sholes with his models before him explained his ideas and told us of his night of coughing and thinking, Mr. Glidden said, "Well, Mr. Sholes, I guess you have coughed up something pretty good and I'd like to have a hand in it." Mr. Sholes replied that we should all have a hand in it as the job was big enough for us all.

One writer asserts that Mr. Soulé invented the type bars but that is a mistake. Mr. Sholes and I had already made a wooden model of the type bar before any forms were talked over in the shop. What Mr. Soulé did devise was the method of hinging and connecting them to the key bars. Mr. Sholes had already adopted the idea of the type bar and the key bar from the piano, of which he was very fond and with which he was quite familiar.

The work on the machine progressed slowly with many halts and hitches, with many parts tried and discarded and many changes of form in the parts retained. The engraving of the letters on the points of the type bars, each at a different angle from all its fellows, gave us great trouble. Everything was slowly and imperfectly done. Nobody there had ever done the like before and it was a very trying and costly experiment. Many of the first ones were spoiled and many others set awry on the bars. Some overran and some fell short on the alignment, but at last, when all was ready, our grayhaired wizard sat down and wrote. "C. Latham Sholes, Sept. 1867," and we had a great time of rejoicing. A reporter for one of the papers was present and while sitting around looking on and taking notes of what he saw and heard, he wrote this rather prophetic but laconic rhyme and left it on the work bench as he went out:

> They let the funny thing go, And by Jingo! It prints the lingo Of a red flamingo, A Greek or gringo, A monk or mingo, Great Dane or dingo.

Professor I. A. Lapham, the father of the weather bureau, had been intied to see the thing go and he said as he started away, "Mr. Sholes, you have a hundred fortunes there." Professor Lapham was another of the world's splendid benefactors, for it was he who devised and helped put into operation the present Weather Bureau Signal Service.

Many grave faults were at once apparent in the new writing machine and directly it was taken apart to begin a long series of corrections and improvements that ultimately ran into hundreds before the machine was thought

fit for the market; then came the great problem of money and management which soon brought two strong, dominant, masterful men into the enterprise. None of us had the means of engag-

ing in its manufacture and we knew by sad experience that it was to be a costly undertaking. Letters were written on the machine and sent to all the men any of us knew whom we thought might be induced to put money into the enterprise. One of these was sent to Mr. James Densmore of Meadville, Pennsylvania, whom Mr. Sholes had known some years before in Kenosha while the latter was the editor of the Kenosha Telegraph and the former its business manager. Mr. Densmore wrote immediately back asking for an interest in the invention, and, upon consultation, it was agreed that he might have an undivided one-fourth interest in it on condition that he would pay the debts already incurred and furnish the capital necessary to start the manufacture of the machine. This he promptly assented to and forwarded \$600 with a promise of more, but he did not see the machine until the next March when he came on and tied himself to it for life.

Sholes and Densmore were not strangers even at the time they worked together on the Kenosha Telegraph, which was fifteen years before they came into business relations in the typewriter. They had met eight or ten years before that at Madison, Wisconsin. A writer in a Brooklyn newspaper says, "Years before, [the invention of the typewriter] one bitter night in mid-winter, when some legislators had gathered close about the red-hot stove of a tavern at the Capital (Madison, Wisconsin) there burst into the room a heavy, snow-covered man

of ridicule and insensible to slights. As persistent as gravity, he would win wherever it was humanly possible. He did win wealth, but he never flaunted it in the faces of those who had treated him with scant courtesy in his days of poverty."

Densmore

Jim Densmore, as he was familiarly called, was a unique and striking character; a great, ponderous, beefylooking man of nearly three hundred pounds weight, with a florid complexion, a great shock of red hair, a shaggy beard, the eye of a hypnotist and the heavy jaw and animal force of the great Hyrcanian bull in <code>Quo Vadis</code>.

His attire was characteristic of his remarkable personality; a seedy, crumpled hat, a long, shabby coat, a vest off color and swearing at everything else about him, trousers too short by some inches for his short, loggy legs and coarse old woolen socks thrust into his low-cut shoes. His shirt, that was sometimes washed and sometimes not, was seldom adorned with either collar or cravat.

He was restless as a tiger, a born bully with a fierce military spirit. He was fearless as a sword-fish and belligerent as a shark. He was long-headed and far-sighted and had the utmost of indomitability. Nothing daunted him nor swerved him from his purpose. Opposition only made him more determined and pugnacious. If one expedient did not gain his point he had another always ready and when fifty expedients failed him he had fifty more crowding on for trial.

However, he was not the man who could take up an unpopular and unknown invention requiring a mint of money for its development, exploit it and create a demand for it, and push it to a paving conclusion. While he was able, determined, and persevering, vet he had an unfortunate personality and manner that repelled many people instead of attracting them, and he never could have accomplished anything with the typewriter except for the fortunate assistance of a partner with a genius for financiering. That partner he found somewhat early in the enterprise in the person of George W. N. Yost, to whom he had the sagacity to go for help. What he could not do for himself, he found another to do for him. He felt and seemed to know by instinct that somewhere along every man's pathway there lies in wait, or will come to being, that which we call an opportunity. Had Densmore been a poet instead of an exploiter he would probably have anticipated and headed off the Kansas poet-senator in the writing of that famous sonnet on "Opportunity," which in all ages to come will be the central star in the crown of fame of John J. Ingalls.

Densmore was neither sleeping nor feasting when Opportunity knocked at his gate, but he was at the doorway looking for it and followed it to the end. Without ever having seen the machine, having only seen a scrap of paper on which Mr. Sholes had written these words of Shakespeare:

There is a tide in the affairs of men, Which, taken at the flood, leads on to fortune

Densmore bought an interest in it and then hastened to begin its development and exploitation. That was his "opportunity," his "tide in the affairs of men," and he recognized it and clung to it. He put all the money he could then command into the experiments needed to perfect the machine and when that was gone he borrowed more.

All the time that was going on he was busy pushing, nagging and jeering poor Mr. Sholes and denouncing the machine as worthless. He often wound up his tirades against it with, "Sholes, this thing isn't worth a damn! and it will never be! It is bound to ruin all of us!" but, as the sequel showed, there was method in his madness. He knew by instinct, or by the wisdom of experience, that to be successful the machine must be able to meet all the requirements of simplicity, harmony, and durability, and it was largely that long, hard siege of hammering and testing to find out what could and what could not be done with it that made the machine acceptable and marketable and overcame a world-long lethargy and indisposition to its use. Model after model was made and tried and yet the machine never quite suited this self-appointed arbiter, this red-

headed Caesar. He insisted that it should be so strong that a whirlwind could not break it, so simple that a child could manage it, and so cheap that every school boy and farmer could possess one. To that end several stenographers besides myself were sought to give the machine the severest tests in actual practice. Among these was Mr. James O. Clephane, of Washington, D. C., official reporter of the Supreme Court of the District of Columbia. He had no scruples about the severity of his tests. He pounded machine after machine to pieces and wrote calmly back: "This will not do: it is weak here; it drags and scratches there; it tears up the paper here; this part is awkward and needs more simplicity: this thing is in the way of the hand: etc." But he generally wound up by saying, "Try it again! Don't

One morning Densmore came to my office and said, "Here, Roby, is another machine with a new wrinkle that Sholes is awfully tickled over and I want you to give it a good thrashing. Find out its weak spots and don't be afraid to hammer it. Sholes is sick of experimenting but I am going on with it and make the thing work or pound hell out of it. But we'll make it go, my boy! Just thrash it enough and it will come out all right." So I hammered it, writing fast and slow, heavy and light, but always coming up face to face with one grim, hard, deeply entrenched fact; the machine would not co-operate in its several parts. It was afflicted with inco-ordination, as the doctors say of a man with partial paralysis. His muscles will not all work in complete harmony and obedient to his will. He staggers and limps and hobbles or does not go at all, and so it was with the machine. At first the keys were set in alphabetic order and we found certain keys colliding and jostling with one another, but Mr. Sholes, being a practical printer, said suddenly one day as we were talking it over, "I've got it!" And while he did not, like Archimedes of old, rush out naked, crying, "Eureka! Eureka!" yet I imagine he was about as happy. He said, "I'll arrange the keys like a printer's font and then they will keep out of each other's way."

Often while I was trying the machine, getting out transcripts of my court reports, Mr. Sholes would sit by the hour watching the work and dreaming over the problems; and often when Densmore had been particularly stormy over the prospective loss of his investments and raging over the delay in getting the machine into the market, Mr. Sholes would say he was

afraid Densmore would drive him crazy, and yet in an hour they would be chatting together in a happy, hopeful mood like a pair of old cronies.

At that time the typewriter wrote only capital letters and the lawyers objected to transcripts in capitals. We dreamed and worked over the problem of a double keyboard but we did not not find the practical solution of the problem, though we made several attempts at it. That was done later by others.

All this time Densmore secured more and more money to put into experiments and patents and models. Inch by inch and step by step he encroached more and more on the inventor's rights and percentages in the property.

He had studied law in his early days and had been admitted to practice at Meadville, Pennsylvania, and some time later had set himself up as a

patent lawyer. Thus it came about that in his capacity as a patent attorney he secured several of the later patents for Mr. Sholes.

Every patent applied for must be accompanied by an expensive model, and for every one of these Densmore demanded some new concession in the title and rights in the invention. These encroachments went on systematically until Densmore's original one-fourth interest in the patents grew to include every fraction of every other right or interest. All the original partners were treated in the same masterful and merciless way, varied only by tactics that best befitted the individual case. They were hard pressed to yield their original rights and cajoled or bullied, as seemed most likely to gain the coveted prize-the full control of the machine and patents. One almost unanswerable argument was always at

the fore on these occasions. Here is a sample of the way it was projected into every deal. One day Densmore came to me and said, "Roby, we are in a devil of a pickle to-day. Our money is all gone and our experiments half done, probably. We have lots of things to do yet before anything will go and Yost tells me he can't raise another cent for us unless he can give more security. More security must be given or the whole enterprise is dead as Haman, as Julius Caesar. Do you understand the situation? Every fellow with a scrap of interest in this thing has got to put up more security. I've gone to the limit and there is no way under heaven to keep from being smashed except for us all to put up more collateral, and if we have nothing else to put up we must put up our interests in the patents. If we all do that I'll make it go vet and we will all

be rich—after a while. If we don't do that we are dead, right now, and we may as well nail down the coffin lid. Sholes and Glidden have consented to stretch a point and Soulé is going to drop out; he can't trot with us any

longer. Now, what do you say? Shall we try or die?" You have read of drowning men catching at straws and you have heard of gamblers pawning their watches and diamonds and even their coats to make a last whirl of the wheel that surely must change the current of their luck and win at last. What a glorious idea it is to think and say, "I will-I must win at last!" We like to be brave; we wish all men to believe that we have courage and nerve. I am now, and was then, human, and when Densmore held up the alternative before me and said, "Shall we try? or die?" you need not wonder that I said, "Trv," and uttered it bravely, although it meant the relinquishment of every scrap of pecuniary interest I had in the machine. I put it all into Densmore's hands to use as he saw fit, to gamble with if you please, and he carefully put it down in his pocket with other minor fractions of interests and when it was all over, lo, the several fragments made a complete whole and Densmore held them.

But long before Mr. Sholes had been induced to relinquish all his rights, Soulé, Gildden, and I had been crowded to the wall and over it, leaving all our rights and interests behind. Densmore could not part with Sholes as easily as he could with the rest of us, for the patents were mostly in his name and he was working day and night inventing and adapting new features and devices that were all the time adding to the value of the invention and enhancing

its prospects of success and Densmore was very careful to have it agreed that all improvements that Mr. Sholes might at any time make should go along with the machine and patents.

When the rest of the primary group of men had been shaken loose from the machine, Mr. Sholes was gently detached by a promise of ample royalities or an annual stipend or a lump sum of some amount that I could never learn definitely. The Sholes heirs say it was a thousand dollars a month, or twelve thousand dollars a year during his life, while many of Densmore's friends say it was to be a lump sum of twelve thousand for his entire interest; but, whatever the truth may be, when all was summed up and the balance struck, an invention that has revolutionized the writing and accounting methods of the world and saved millions upon millions to

the business and governmental interests of the planet had passed from the inventor to the promoter, from its creator to its exploiter.

It is but just to say that the heirs and friends of the two men disagree radically as to Densmore's character and conduct.

A gentleman intimately and long connected with the Remington machine and well acquainted with the men writes me: "Densmore was not a greedy or selfish man. He had no desire to accumulate wealth. He had before his death a large income and he used it all in benefiting other people and doing all he could to improve the typewriter so that it should be a benefaction to mankind. He received from time to time a great deal of money in the way of royalties, but it all either went back into inventions or into paying debts incurred in getting the ma-

chine upon the market, or into paying unjust claims that were made upon him."

I am disposed to believe there is a good and substantial foundation for that claim. All men of dominant, commanding character have two or more distinct sides to their lives. It is said, and probably truly, that the late Russian Minister, VonPleve, who was recently assassinated on account of his iron-handed rule over the people of his country, had a strangely double impulse in his life and character; one, a heartless, relentless impulse to override and sweep away all opposition to lone-handed autocratic rule in Russia: the other, a tender sympathy, a gentle sweet friendship for his own and all whom he loved and labored for in a social and personal way. I believe the same thing was true of Mr. Densmore. I am told that while he was crowding everything and everybody to the wall in his efforts to exploit the typewriter, he often went without his dinner, or dined on apples and crackers, that he might use every possible fraction of a dollar that he possessed in the furtherance of his project, and that at the same time he was helping needy relatives and friends who were pinched by poverty, and that he paid the debts of some of his relatives where he was under no legal obligation to do so in order to save the family from financial discredit, and that on several occasions he paid absolutely unjust claims against himself rather than have his business or family honor questioned in court and the public prints. It so often happens in other men that I can readily believe that he possessed those two great and diametrically opposite characteristics of a strong man, and that on one set of people he worked

many hardships while on another set he conferred many and ample blessings.

Mr. Sholes was always beneficence personified, while Mr. Densmore was so only on occasions. He was a born He believed in making autocrat things go, and when he wanted a thing to go he commanded and hammered till it did go, but when off duty as a commander he could and would be gentle, kindly, and warm-hearted to his friends in a remarkable degree, and I believe he had a generous feeling of friendship for Mr. Sholes even up to the time of his death. I am informed, and have no reason to doubt, that when Mr. Sholes was nearing the end of the journey of life with consumption, Mr. Densmore furnished him money with which to make a winter trip to Florida and a summer trip to Colorado, but whether it was done in

payment of a debt or as a friendly gift I cannot say. Mr. Sholes' friends say it was a part of a much larger sum due him on contract, while the friends of Mr. Densmore stoutly deny it and say it was a gratuity.

One of his close personal friends and business associates writes me: "Mr. Densmore paid Mr. Sholes many thousand dollars for what was a crude, impractical, and unmarketable machine. He paid Mr. Sholes more money than he ever agreed to pay and paid money to his heirs after Mr. Sholes was dead. Mr. Sholes lived in comfort for many years upon money paid by Mr. Densmore, while Mr. Densmore, to my personal knowledge, lived in an attic upon apples and crusts of bread at the very time when he was paying Sholes thousands of dollars a vear."

Mr. A. F. Thompson, for years the editor-in-chief of the Ianesville Ga-

zette and then of the Milwaukee Sentinel, says: "I knew Mr. Sholes quite intimately for over thirty years and he was one of the best men with whom I ever came in contact Mr. Sholes was a dreamer and an idealist and, though not a writer of poetry. he possessed a true poetic nature. He disliked the details of business and the painstaking necessary to make money was his particular aversion. The wondet is that such a man should be the inventor of one of the most useful. modern labor-saving machines, but it is no wonder at all to those who knew him well, that he should let its great promise of a vast fortune slip through his fingers and into the pockets of bolder and more energetic men."

As I was out of business and out of touch with either party to that dispute long before the end came to the two principal characters in the drama, I have no personal knowledge as to which is right and which wrong, but, judging by the course of human events in other matters, I am inclined to believe the spirit of partisanship has carried both sides to extreme positions. widely divergent and far apart, and that the truth lies somewhere on an intermediate plane. Both sides feel that they are right but I have never been able to find any document with verified signatures to sustain the contention of either side. So far as I have seen, nearly all agreements between the two chief parties in the matter were verbal. Few of their many contracts were reduced to writing and it will probably never be definitely known just whether Mr. Densmore did or did not keep his engagement with Mr. Sholes, but yet I never knew them to really quarrel. They differed, and differed seriously on some things, and still they held a generous and tentative agreement as to their general relations. Both men are now dead and neither can be interrogated. Densmore died September 16, 1889, and Sholes, February 17, 1890, only a few months apart, and in their death the world lost two valuable men, though as unlike as day and night.

I have, by an extensive correspondence, obtained the judgment of a great many people as to the merits of this unfortunate controversy. One gentleman, long and closely connected with Densmore, writes me: "One instance of Mr. Densmore's self-sacrifice comes to my mind at this moment. Mr. Yost left the business saddled with a debt of some \$200,000 and Mr. Densmore, though obliged to travel a great deal in connection with the business, yowed that he would never ride in a sleeping car until all those debts were paid, and

upon one occasion he invited me to go with him several hundred miles to assist in a business negotiation and I rode in a sleeping car while he, with an income of over \$25,000 a year, sat up all night in a day coach in order to save the sleeping-car fare to devote it toward the payment of the debts. I think such action on his part was foolish and unwise, but nevertheless it showed that he was actuated by a desire to pay all he owed and not to benefit himself."

I quite agree with my correspondent that with an income of \$25,000 a year at that time in the history of the machine such conduct was "foolish," but it only helps to show that the man was at least erratic.

A member of the Densmore family writes: "James not only devoted those fifteen years unremittingly to the development of the typewriter, but he expended all of the thousands of dollars that yet remained to him of his share of the profits of the Densmore Brothers oil wells and for many years he was obliged to practice the utmost economy in order to bring about results. He rented an inexpensive room in New York, which was at once his abode, his office, and his workshop, and he supplied and prepared his own food in the most economical way possible."

Another correspondent writes: "You ask for any traits of character observed by me in Densmore during my business relations with him. He was sometimes generous and lavish as a prince and sometimes as great a pinch-fist as old Shylock. On my first deal with him, he very much wanted something I had to sell and during the negotiations we had to travel from New York to Chicago and Washington to see other interested parties. On that trip I was treated like

a prince of royal blood. My passage was paid, my sleeping-car fare and dining-car fares were paid, my porter was tipped, my shoes were blacked, and I don't mind saying that a bit of good champagne was included in the layout, clear back to New York, where we closed the deal. I have always been satisfied and I guess he was."

One gentleman writes me that Densmore had no care to make money and and was really indifferent about wealth, while another writes that it was his sole and whole ambition in life. I think I may safely say that he did take a great deal of pride in making money and a business reputation, too. Such a man could not be void of pride in his undertakings, and the fact that he succeeded in making a great deal of money in the years he was connected with the Sholes machine is well attested by his own brother who writes that at his

death he left his heirs over half a million dollars, and that, too, after having expended very large sums in developing and building up the business.

While a member of the firm of Densmore Brothers, in the oil business in Pennsylvania, James Densmore became interested in the business of transporting oil to the seaboard. About that time his brother, Amos Densmore, invented and patented a method of transporting oil by tank cars and came into collision with the Standard Oil Company in the courts, where, after a hard fight, the Standard won the contest and broke the Densmore monopoly, only to establish one of its own instead. Then James Densmore went into partnership with D. T. Watson, one of the Standard representatives, and they were the first to ship oil to New York in tank cars.

Yost

G. W. N. Yost, to whom Densmore had the sagacity to go for help in raising funds to carry out his contract to finance the machine for his one-fourth interest in it, was a marvelous man in his sphere. He was a plausible, longheaded, business adept with a genius for what is called finessing, and he also had much of the same marvelous energy and push that Densmore had, but with it all he had that quality of refinement and high breeding with its concomitant suavity and royal bearing that goes to make up the conquering resources of a great diplomat. He had in his general makeup that mysterious something variously called magnetism, power, force. He had a subtle influence over his fellow men and would have been a great organizer anywhere in the commercial, military, or political camps of the country.

He knew all the moneyed men in the East and the Middle West. He knew where great treasures of gold and silver and stocks and bonds were piled up in the vaults of New York and other cities, waiting for profitable investment, and he went after it and continued his quest until he coaxed it out of its hiding place and wedded and bonded it to the typewriter in a lasting conjugation. Time and again he was repulsed by the money kings of Wall Street to whom he applied for aid, and at each repulse he went smilingly and persistently to the next man with money, becoming at each repulse, seemingly, more hardened in his determination and more stoutly thewed for the next encounter. And he won! He won the capital he needed, the help he wanted, the public mind to the use-

fulness of the typewriter, and the markets of the world through the help he commanded.

It is probably due to Mr. Yost to say that he did more than all others combined in financing and placing the machine on the market. It was he who influenced the Remingtons, the great gun-makers of Ilion, New York, to take up the manufacture of the machines in 1873 and devote the finest shops and machinery and mechanical talent in the country to the production of an improved machine that ever since has been known as the Remington machine. It was Yost who, when the sales department of the business did not make suitable headway in selling and distributing the machines, induced another great manufacturing concern, the Fairbanks Scale Company, whose sales agencies were established all over the world, to undertake the sale and

distribution of the machines throughout this and other countries.

While Yost had a special talent for commercializing the matter, Densmore had a special talent for pioneering and frontiering. While Yost was financing and distributing the machine, Densmore was hammering things into shape without respite or let-up in all the shops where its manufacture was at-

tempted.

Yost was always accounted "a hustler from way back." He was an inventor as well as promoter and financier. He was early in the oil fields of Pennsylvania and did a large business in buying and shipping oil to other markets. He invented a method of preventing oil barrels from leaking and was in a fair way to make a large profit from the invention when the Densmore method of tank car transportation came into use and to a large extent

wiped out the shipment of oil in barrels. After quitting the oil business, Mr. Yost invented and patented a reaping and sowing machine and set up a large factory at Corry, Pennsylvania, where he carried on the business for some time. When Densmore went to him with the typewriter proposition, he sold his factory and business and took an interest in and devoted most of his time to the typewriter for several years.

Making and Selling Machines

The manufacturing of the machines had its various vicissitudes, its ups and downs, its trials and triumphs. The first models and a very few so-called working machines were made in Kleinsteuber's shop in Milwaukee and when we felt we might really have something to sell, and someone to sell to, the question of a factory became an im-

portant matter. While Densmore had agreed to finance the machine to a finish, yet his pocket was nearly always empty in those early days and we had no means of building or buying a shop, or of procuring the large amount of special machinery and dies necessary to profitable production, and we could find no shop equipped with the necessary machinery and appliances. As a makeshift a little old stone building on the canal in West Milwaukee, near Edward Sanderson's big flour mill, was secured, in a place where cheap water power could be had from the canal. We could not afford a steam plant. A meager supply of machinery and tools, mostly second-hand, was secured and a few, a very few, workmen employed and the first factory was started. But what a start! Everything was of the rickety, rattle-trap, tumble-down character that elsewhere, the world over, is almost a sure guaranty of failure. There, after untold trials and crushing tribulations, a few rude machines were actually set up and started on their way to the junk shops of the country, where sooner or later they all landed, battered and broken, mournful reminders of high hopes and lofty ambitions threatening to go the same way. Then a new scheme was tried and arrangements were made for more adequate shop facilities in Chicago, When the Chicago factory had turned out fifteen machines and wanted its money without waiting for the sale of the machines to meet the demand, some sorry heads were knocked against the wall; there was a turning inside out of empty pockets and the Chicago venture was called off.

It was during this time that Densmore was most active and persistent in his transfer of interests from the

inventors to promoters. Nobody could deny his argument that we were "up against it, good and hard," and he and Yost must have larger interests in the machine to enable them to secure more money; and they got what they must have and kept on while it lasted. It was a constant reminder of the old story about the farmer wanting "more land to raise more corn to feed more hogs to buy more land to raise more corn to feed more hogs." So by an endlesschain scheme of consequence and sequence, round and round the circle we were hurled and hustled, to raise more money to make more machinery to make more money. Then, when a majority interest in the machine was secured, a little more capital came in and the Milwaukee shop was improved and nominally enlarged and some better machines were made-as many as we could sell.

Up to this time few machines had actually been sold. A few were out on trial and some other few were being carted about the country as samples in the effort to interest capital. Densmore and Sholes took one to the office of the Western Union Telegraph Company in New York. They went in and landed it on a table in the president's room and then Mr. Sholes showed him how it would work and offered to sell the whole thing, patents and all, for \$50,000. The president called in some expert telegraphers and had them examine it and told Mr. Sholes he would give an answer in a few days. Sholes and Densmore started home. Sholes very much depressed and Densmore correspondingly elated. When they compared notes of their impressions, it was found that Densmore thought they had the sale practically concluded, while Sholes thought the answer would be that one of the Telegraph Company's expert mechanics could make as good or better machines for less money.

Then they went home and repeated, with suitable variations, the scene in and around old Independence Hall when the Declaration of Independence was being formulated. Day after day we discussed the question, "Will they do it?" Densmore for a long time insisted that the Telegraph Company would buy us out and Mr. Sholes was playing the rôle of a doubting Thomas. He said the price was too high; that they, having seen the machine, could get some competing form of machine for less money. Then Densmore would declare with great vehemence that the company would have it-could not get along without it. There was no danger of a competing machinehadn't he drawn up the patent papers

and made them so broad and inclusive that nobody else could get into the patent office edgewise with any competition, and so, while the days flew like the birds of autumn, we over and over asked and answered the question. "Will they do it?" Like the man who is waiting the answer of the woman in the case, or that group who are "waiting for the verdict," we dreamed and doubted through many anxious days and weeks without getting their answer and reluctantly we came to the conclusion that the long silence meant the death of our hopes, so we again put on mourning badges and laid our dead away gently and put up another headstone in our "Mount Hope Cemetery."

But Densmore refused to be consoled, or to believe in the writ of death. He still felt sure that it was only a case of suspended animation—a sort of trance which would yet pass off.

He still played the rôle of cheerful optimist and kept hammering. Several months afterwards he went to see the president of the company and was told that one of his employees, a man by the name of Thomas A. Edison, had told him that he could heat the Sholes machine and make a much better one. but that, after spending \$40,000 on experiments, the young man had not vet shown up with the promised machine, and while the name Edison stands sponsor for a great many excellent inventions I have vet to learn that it adorns and guarantees the merits of a superior typewriter.2

That is but one example out of hundreds of rebuffs which the machine

² A letter to Thomas A. Edison asking him to comment on this portion of Dr. Roby's narrative brings the statement from his assistant, W. H. Meadowcraft, that the latter part of it is incorrect. Mr. Edison's own story of his connection with the typewriter is given in Dyer and Martin's authorized biography, entitled Edison, Hit Lift and Inventions.

and its promoters met during its early days.

It is singular how many patentees and promoters hurry away to the national capital in an effort to get their inventions adopted or recommended by one or all departments of the government, and the typewriter was no exception to the rule. Densmore, Yost, and Sholes, all three at various times, spent days and weeks and months trying to get the typewriter adopted by the federal authorities, but while the heads of departments admitted the desirability of such an innovation, yet most of them ended the matter by saving they had no such authority to buy or even use the new device.

In the Supreme Court, the Treasury, the Patent Office, the Post Office and elsewhere, there were statutes and rules and regulations of various kinds

providing for the character of records that should be kept and the type of official documents that should be executed, and those statutes and rules must be abrogated and new authority obtained before the typewriter could enter any department of the government.

Another bar to progress was the fact that none of the clerks in all the service knew anything about the use of the machine, so, as a means of facilitating an uncertain problem, schools of instruction had to be established in Washington and all the large cities and instructors had to be in structed before they themselves could teach; and there was nobody to teach the teachers. Mr. Sholes and myself, perhaps, knew most about the manipulation of the machine for experimental purposes, but he had never put it to a commercial use and, indeed,

was a very poor teacher so far as the function of the schoolmaster was concerned in the matter and I was an official reporter in several courts and had no time for teaching. At first few people could be induced to think of making a business or calling out of typewriting. It was generally thought to be only useful to the shorthand fraternity. No newspaper editor or contributor had as yet conceived the idea of composing before the typewriter and handing out copy themselves from its platen. They supposed that all matter for the printer must first be written in longhand and then copied on the machine.

So far as I can ascertain, Mark Twain was the first man to make a practical application of the typewriter in the immediate and first-hand production of manuscript for either books or magazines, and he, who of all men can turn a funeral into a frolic most easily, and finding, like the man who kisses a woman on the sly, that he can have more fun if he denies it, gives us his version of his first acquaintance with the machine as follows (in Harper's Weekly):

"I saw a type machine for the first time in—what year? I suppose it was 1873—because Nasby was with me at the time and it was in Boston. We must have been lecturing, or we could not have been in Boston, I take it. I quitted the platform that season.

"But never mind about that, it is no matter. Nasby and I saw the machine through a window and went in to look at it. The salesman explained it to us, showed us samples of its work, and said it could do fifty-seven words a minute—a statement which we frankly confessed we did not believe. So he put his type girl to work and we

timed her by the watch. She actually did the fifty-seven in sixty seconds. We were partly convinced, but said it probably couldn't happen again. But it did. We timed the girl over and over again, with the same result always—she won out. She did her work on narrow slips of paper and we pocketed them as fast as she turned them out, to show as curiosities. The price of the machine was \$125. I bought one and we went away very much excited. "At the hotel we got out our slips

and were a little disappointed to find that they all contained the same words. The girl had economized her time and labor by using a formula which she knew by heart.

"At home I played with the toy, repeating and repeating The Boy Stood on the Burning Deck' until I could turn that boy's adventure out at the rate of twelve words a minute; then

I resumed the pen for business and only worked the machine to astonish inquiring visitors. They carried off many reams of the boy and his burning deck."

To the editor and author, the real serious difficulty was that they needed all their time and mental attention for the generation, arrangement, and classification of their thoughts and the orderly arrangement of their words into phrases, sentences, paragraphs, etc. They had written what we call long-hand from childhood up and it had become automatic, like walking or breathing, requiring no longer any particular attention to the working of the human mechanism of hand and arm in producing letters and words; but not so with the new machine. There was new mechanism added to that of the hand and it took two hands instead of one to produce the words.

and while that was being done it took practically all of a man's time and mental attention to see that the right combinations were made on the machine, so that, until men were so familiar with the typewriter that they could operate it automatically and without stopping to hunt for the letters and characters on the key board, and could simply think of the word wanted and produce it without thinking how it was to be produced on the machine, no headway could be made with it in original writing and composition. Now, many editors and authors sit at the machine and compose as composedly as they ever did behind the pen or pencil, but the time, the weight and the volume of inertia and absolute antagonism that had to be overcome before the machine could enter and possess its realm was simply appalling.

Densmore did not have the placid, methodical impulse for details that could overcome the ineptitude of masses to learn any new thing. He had no patience with dullards and no tolerance for men of different views. The matter was all as plain as day to him and ought to be just as lucid to others; so he railed and raged over the delay in getting machines sold and yet, if he heard anyone express any doubt about the feasibility of the undertaking, or any doubt about its success, he called them down and to account very promptly and forcibly.

In contrast, the philosopher, Yost, took all things sanely, calmly, philosophically. On the theory that the world was not made in a day, he argued that the typewriter could not prevail in a day; that it must of necessity be a matter of slow, steady growth, accompanied by much cultivation and

"mothering." If he could sell one machine this week and two the next and three the following week, his mind was easy and his sky clear. He knew what it meant and kept on.

While casting about for facilities for making and selling machines and to overcome the lack of shop facilities and expert mechanical talent in Milwaukee, Mr. Densmore, who had lived at Meadville, Pennsylvania, thought it would be of great mechanical advantage, at least, if the Remington Arms Works at Ilion, New York, could be interested in the matter. They had ample shop facilities, ample machinery, and mechanical talent that could not be surpassed, if equalled, anywhere in the country, and what was of further great importance, they had plenty of capital for handling such an enterprise; so, in 1873 Densmore and Yost both repaired to Ilion and laid the project before the Remingtons. At first they were reluctant and disposed to reject the proposition, but Mr. Yost, eloquent, unctious, magnetic, far-sighted, good at prophecy, labored as he had never labored before to secure a contract. Hour after hour he talked and figured and embodied his dreams and prophesies in ringing rhetoric and telling figures, until at length one son and then another and at last the father in the great concern yielded, became convinced, and were won over to the undertaking.³

Among the terms that were afterwards arranged were the setting apart of one entire section of the great gun

³There is here a slight misstatement of fact. Eliphalet Remigno Sr., the founder of the fixed had been dead a dozen years at this time. His three sons, Eliphalet Jr., Philo, and Samuel Remington, were the members now composing the firm. A fuller account of the securing of the contract with the Remingtons is given in The Story of the Typecriter (Herkimer, N. Y., 1923), 56-58.

factory and devoting it wholly to the making of typewriters; then a corps of the most expert mechanics in the establishment was to be put to work on the machine to systematize and simplify its construction, and, as far as possible, improve its structure; then the name of the machine was changed from "Sholes and Glidden" in the hope of giving it wider popularity and a deeper confidence in the public mind, for the name of Remington was a tower of strength in the manufacturing world as it was in the United States army, where his rifles were then foremost of all arms in the service. In a few months the wrinkles were so far rubbed out of the manufacturing problem that more very good machines were being made than were being sold. They began to pile up in the shop and Densmore and Yost wanted their royalties from the market place, but

the Remingtons not being general manufacturers and not having any wide distribution of "sales agencies," as they sold chiefly to the government. the selling problem came crowding to the front. One day Mr. Yost put on his hat and went up to St. Johnsbury, Vermont, to see the Fairbanks people. He knew that Erastus Fairbanks in his lifetime had been governor of the state and had invented the platform scales that then bore his name and which at that very time were weighing a millionmillion pounds of merchandise every week in this and other countries. His sons, the Fairbanks Brothers, were still carrying on and extending the business and had sales agencies in nearly every commercial country on the globe. Yost did not need to be told that the Fairbanks people could sell things. He knew it. So he went up and labored with them to induce them to

put the Remington typewriters on sale in all their agencies over the world. It was a big problem, but he finally convinced them that it held big promises of profit and they undertook it. In due time they began to bank their profits from the undertaking; that gave the machine a new and great impulse and sent it around the world on its journey to the counting-rooms and offices of mankind.

That pioneer machine of 1867, improved and perfected seemingly to the utmost of human ability, still holds the crown and scepter over all the writing machines yet devised and wrought out by human ingenuity. Hundreds of typewriter patents on parts or whole machines, of a very wide diversity of forms and uses, have been issued since June 23, 1868, the date of Mr. Sholes' first patent. And the end is not yet!

After Mr. Sholes had parted with all his interest in the machine, with little money and less health, having had almost fatal hemorrhages from the lungs, he lay on his bed for many weary months, a helpless invalid, and on February 17, 1800, thin, emaciated, whitehaired and whispering his final directions to the family, his tired hands relaxed from their hold on the anchor of being, his dreamy soulful eyes closed on the scenes of his trials and triumphs, and he took his departure, whispering the lines he had so many thousands of times clicked off on his several machines.

There is a tide in the affairs of men, Which, taken at the flood, leads on to fortune.

It is sufficient to say in closing that a host of geniuses have had to do with the development and achievements of the typewriter. Sholes, Soulé, Glidden, and, so far as I know, all others except

myself who were connected with the first machine are dead, but their genius still blesses the race with a boon that shall ever increase in its splendid beneficence.

Chapter II

Humbugs and Spurious Claimants

ROBABLY no inventor of anything really useful to the human race ever escaped having his claim

and patent disputed or his grave robbed of his choicest jewel, the credit of having done the beneficent thing that he really did do for his fellow men, and Christopher Latham Sholes was no exception to that rule. He is dead, and while he still speaks to the world from the rostrum of the typewriter, yet he did not anticipate the desecration of his grave and write "THIEF!" before some names in the world where that accusing epithet belongs. He was too gentle and kind to have done it even if he had known that the jackals in human form would dig up his coffin and try to carry off his laurels and

defame his sacred memory. He went serenely over to "Fame's eternal camping ground" and there pitched his tent and left a grateful world to take care of his honestly-earned fame as a benefactor. Mr. Sholes died fifteen years ago, and during the intervening vears between his invention and his death he had reasonable possession of the credit due him as the real inventor of the only practical typewriter, for his was the pioneer of all the practical machines the world ever saw. It was the forerunner of all the successful machines in use to-day and it will be the typical sire of all that shall follow, however much their forms and features may vary and depart from that of their ancestor, and to that extent at least, the credit and homage of a grateful world is due him.

However, in the year 1904, fourteen years after his death, we find the vandals and defamers at their accustomed work of denying his rights and claiming his laurels for themselves while trying to set up a monument of shame and ignominy over the grave of a dead hero. They evidently thought that Mr. Sholes and all the men who co-operated with him in devising and constructing that pioneer machine were dead and therefore unable to contradict their ignominious pretensions, but, true to the old statement of Scripture, "being dead, he yet speaketh," as may be found in the records of the patent office and many of the great business establishments of the world, and I, one of his co-laborers, am still in the flesh and can speak for him with a human tongue. During the last twenty years I have heard and read of several parties who claimed the honors which rightfully belong to Mr. Sholes, but I only deem it necessary to refute and

show up one of these defamers and humbugs as they are all much alike in their animus and methods. On Sunday, October 2, 1904, the Register and Leader of Des Moines, Iowa, gave place in its columns to one of these spurious claimants. His long and foolish piece of defamation appeared anonymously, as so many others do. He was very naturally ashamed of his identity and preferred to conceal it. Here is his proclamation to a long-suffering and long-defrauded world:

The inventor of the typewriter, the machine now known to the mercantile and professional world as the Remington typewriter, was an Iowa man named Albert Peeler, who resided at the time in Webster City, Iowa, where he made a living as gun and locksmith. Though millions have been made through this invention, Peeler died a poor man.

A natural-born genius, he made and perfected probably a hundred different things during his lifetime of one kind and another, none of which brought him into prominence as an inventor or produced anything more than a passing notice, with the exception of his model typewriter, which did attract attention at Washington when he went there to secure a patent on it.

With his wife and two children Peeler lived in a quiet way, known to the community and his acquaintances as a man who was gifted with an ability to make most anything he turned his hands to but rather eccentric in his habits and manners.

His small gunshop in Webster City was possessed of the ordinary collection of tools such as are common to gunsmiths. Whenever occasion demanded something not at hand, this genius stopped his work long enough to make such as was needed. It was this way when he conceived the idea of making a writing machine. Such a thing had never been seen, heard of, or talked of. It was

an original idea that Peeler alone produced. It originated in his own brain and was purely the result of his own powers of observation and executive ability. To make such an instrument was his next thought. A man with a less gift of ability would have found it a most discouraging task but Peeler took to it kindly and with slow deliberate cunning and resourceful planning he soon had the general outline of the machine fixed in his mind. The details were overcome as he progressed: not, however, until he had exerted his talent to the utmost, was he at last successful in bringing to completion the subject of his wonderful talent. True, the machine was crude. It did not have the nickled attachments and contrivances of the present-day machine but it wrote and did it well. other words, the thing "worked,"

Delighted and encouraged with the success of his invention, the next step was to secure it with a patent. This called for a trip to Washington, D. C., where he was given a hearing and an opportunity to demonstrate what his machine would do before the officials of the patent office.

"A machine that will write letters," was the way it was referred to by these officials. It not only created interest but it amazed them. Such a thing had never been heard of. Back in 1866 the country was just beginning to get used to steel pens and here was a man with a machine that put pens of all descriptions out of business and enabled one person to do the work of several in the most legible manner possible. Peeler's letter to his wife gives a hint of his reception. It is as follows, written on his model during the time he was at Washington:

"Washington City, June the 19th, 1866.

Dear Companion: We are both well. I
feel splendid. I am now in the office of Chipman & Co. The machine has been examined by a
great many shrewd men and they think it is the
greatest curiosity of the age. They also think

it is of great value. They are going to take the first step to procure a patent immediately. The draftsman will be here in a few minutes. Colonel Smith thinks he will get a patent this week. I may not get away from here for two or three weeks yet; I cannot tell how long I'll stay, but one thing is certain, I'll come home as soon as I can. I will send you some money in a few days. If I stay here your wants will not be forgotten. Board is from \$12 to \$20 a week here: I am getting fat as a hog on it; to sum the whole thing up, prospects are good. Write to me immediately and direct your letters to A. Peeler, Box 708, Washington City, D. C. I must close. I will write soon again. Yours as ever.

The return of Peeler from his Washington trip and the refusal of the Patent Office, for some reason or other, to issue him a patent on his machine is but a sad memory in the history of the man. Days grew into months and at last the notice arrived informing him that no patent would be issued.

Sharp-eyed men who examined the machine carefully did so with a purpose in view. It was not long after that a patent was issued on a model presented to the Patent Office which corresponded very closely to

the one originally submitted. A patent was granted on this machine. The patent was issued in the name of a firm which soon disposed of it to the Remington Arms Company, then located in the East, which placed it on the market and the Remington typewriter of to-day is an improved machine from the original model.

Disheartened and discouraged by his failure, Peeler negotiated with several firms and at last sold his entire right and interest in the machine for \$3,000. This sum was the largest amount he ever received for any of his numerous inventions and stands as the masterpiece of his accomplishments from a financial standpoint, although many which were subsequently cast away as being of but little practical value to anyone, would have proved valuable if placed in the proper hands.

From Webster City Peeler moved to Fort Dodge where he resided for a number of years and continued to

make a living as a gun and locksmith.

From Fort Dodge he moved to Lehigh and it was while making his home at the latter place that he displayed such an untiring zeal for inventions.

An air gun which would send a bullet with the same velocity and aim as powder was one of his inventions. The model was given numerous trials and it did splendid execution. The Government heard of it. When its possibilities were demonstrated they ordered it destroyed at once and warned the inventor not to make another. It was regarded as a most dangerous weapon in view of the fact that it was noiseless and in the hands of a wickedly-disposed person would prove disastrous.

When an idea entered Peeler's mind it was soon carried out in a material way. To make whatever attracted his fancy was seemingly easy. Contrivances for all manner of things of household utility were a source of amusement and occupation for him; all, however, of a metal character as his whole forte seemed to lie in metal.

It was during his residence in Lehigh that the Government discovered that someone was taking out the interior of twenty dollar gold pieces, filling the cavity produced with lead or other metal of lesser value and putting the coins back into circulation. The Secret Service men were put at work on the case and it was not long until Peeler's name was mentioned to them as a possible suspect, owing to his ability to perform whatever he undertook of a mechanical nature. The officers, while lacking proof, caused him to be arrested and brought before a federal judge who questioned him closely.

"Did you ever do any of this work or have you ever attempted to do it?" the judge asked.

"No sir, I have not," answered Mr. Peeler.

"Do you think you could do it?"
"Yes sir, I do. It does not look
hard to me."

And there seems to be no doubt but that he could if he wanted to. Lack of evidence that he did do it soon procured his release.

Peeler, during the latter days of his life, seemed to lose hope of ever being able to improve his situation in life and sought relief in the bowl that cheers. Married the second time, he seemed to be devoted to his wife and children, of which there were several, but life appeared to hold little inducement for him to strive for and gradually he lost his ability to perform mechanical miracles until death blotted out one of the greatest geniuses that Iowa has ever claimed.

In her humble home in Lehigh his wife still resides, while his children contribute to her comforts and cherish the memory of a kind and loving father whose great talent to provide for them that which if properly managed should have made them independent.

What purports to be Peeler's portrait accompanies this article and gives the proper psychologic hint of genuineness, as all portraits in the public prints do. For who can deny the truth of an article in the papers with a portrait attachment? Psychological or suggestive evidence is but another kind of "circumstantial evidence," and the courts give so much weight to that sort of proof that they will often convict men of even the high crime of murder on circumstantial evidence alone, so Peeler's picture is printed with the article as a make-weight of its authenticity and veracity.

In this case, as in most other cases of spurious crime, there are numerous ear-marks of fraud and falsehood, and to show how preposterous is the claim of the writer of this article, I need

make but a few quotations and comments thereon. He says: "The return of Peeler from his Washington trip and the refusal of the Patent Office, for some reason or other, to issue him a patent on his machine, is but a sad memory in the history of the man." That is falsehood number one. Peeler's application for a patent on his machine was filed in the Patent Office on August 14, 1866. The filing number was 57,182 and a patent was issued to him on that application on August 14, 1866.

The patent-office cuts and drawings, showing what kind and form of machine was patented as well as the full text of Peeler's claims in the case, are to be found in Volume III of the patent office reports for the year 1866-67, at page 685; so Peeler was not denied a patent on his machine as his champion claims.

I quote again: "Disheartened and discouraged by his failure, Peeler negotiated with several firms, and at last sold his entire right and interest in the machine for \$3,000." Did anybody in the whole history of patents ever hear of anybody but Peeler who could sell an invention which he could not get patented for \$3,000, or for any other sum? If he could not get patent protection, then anybody could make it just as lawfully as Peeler could. The sole aim and object of the patent is to safeguard inventors against other people making and selling their inventions, and if a device cannot secure patent protection, anybody can make, use, or sell it without leave or license from the inventor. Then what had Peeler to sell, if his biographer told the truth about his being refused a patent? To whom did Peeler sell his machine for \$3,000? He did not sell it to Mr.

Sholes or any of Mr. Sholes' friends or associates, but we are charged with stealing Peeler's invention and with manipulating the Patent Office and corrupting its officials and getting his application denied and then ourselves getting a patent on his machine and selling it to the Remington Arms Company.

So far as my knowledge goes (and I was very intimate with Mr. Sholes and his associates) neither Peeler nor his machine was ever heard of by any of us prior to nor for a long time after the date when Mr. Sholes got his patent. Mr. Peeler certainly never presented his machine to us for inspection before he applied for a patent and the Patent Office will never, under any circumstances, let any outsider see any model or drawing or claim on which a patent is being sought, and all sane inventors are exceedingly careful to guard their

guarded by a formal application for a patent. Ever since his enemies broke into his shop at night and carried off Eli Whitney's model of the cotton gin and scandalized the whole country, all inventors take great pains to protect themselves until such time as the Government steps in and does the protecting for them. Peeler's apostle says: "Sharp-eyed men who examined the machine carefully did so with a purpose in view." Who were these sharp-eved men? Neither Mr. Sholes nor any of his associates were in Washington. We were all in Milwaukee busy with our own work, not even dreaming of the existence of Peeler or his machine. I myself never heard of Peeler or his inventions until the late fall of 1905 when a friend of mine having himself read the story in The Typewriter and Phonographic World, sent me a copy of it.

Let me quote again: "'A machine that will write letters' was the way it was referred to by the officials. It not only created interest but it amazed them. Such a thing had never been heard of." And yet, at that very moment, there had been a patent issued to Henry Mill of England for a typewriter as far back as 1714, and as far back as 1829 an American patent for a typewriter was issued to William Burt of Detroit, Michigan, and in 1822 a like patent was taken out in France by Xavier Projean: then in 1840 Bain and Wright patented another one in England, and in 1843 Charles Thurber of Worcester, Massachusetts, patented a typewriter, and in 1844 another one. In 1850 J. B. Fairbanks patented another typewriter, and in 1850 O. T. Eddy of Baltimore patented another one, while in 1856 A. E. Beach patented still another one. All that and more

occurred more than ten years before the date when this ignorant humbug says "no such thing had ever been heard of."

From 1856 to the present time hundreds of patents for typewriters or parts thereof have been issued, not only in this but in most other countries. In this country alone 2,830 typewriter patents were issued prior to 1905, and in the year 1900 no less than 144,873 machines were made and in still later years at least 200,000 machines are sold annually. During the seven months prior to August 1, 1906, there were \$3,279,281 worth of typewriters exported from the United States to other countries, which means that other countries are paving nearly \$6,000,000 a year for American machines. There are \$10,000,000 of capital in this country alone invested in the production of typewriters, pro-

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ducing an annual output of \$7,000,000 worth of machines, while 10,000 workmen are employed in the business, but in the midst of all this great activity. most men would ask in vain, "Where is Peeler's splendid machine? Who makes it? Who sells it? Who uses it?" I think I can give a fairly satisfactory answer to the questions. A few men are living who were directly and indirectly associated with Abner Peeler in his typewriter venture, but the man most closely identified with him in the matter is, unfortunately, dead. That man was Mr. W. A. Crosley of Webster City, Iowa, whose brother is still living and writes me:

Webster City, Iowa, June 12, 1906. H. W. Roby, M. D., Topeka, Kansas.

Dear Sir: I am in receipt of yours of the 9th inst., asking for information about the Abner Peeler type-writer. My brother, W. A. Crosley, now deceased, had an interest in the patent and went to Washington with Peeler and necessary papers were presented direct to the commissioner at the Patent Office and

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the patent was secured without the intervention of

I knew Abner Peeler very well and am familiar with the history of this matter and think I can locate the original machine. I know where it was a few years ago but am told the man who then had it either sold or gave it to a relic collector, but I am a very busy man and I cannot a this time afford to give the necessary time to this work now. I will consider the matter and advise you when the V your struly.

G. W. CROSLEY.

On July 7, Colonel Crosley wrote again:

H. W. Roby, M. D., Topeka, Kansas

Dear Sir: Your letter of the Lath June has remained unanswered because I had not found time to take the matter up and can only do so now in a brief way. I think I told you in my former letter that my brother accompanied Peeler to Washington, D. C., and after procuring the patent, left him (Peeler) there, provided with all the necessary facilities to complete the improvements on the machine. My brother came home and about a month or six weeks later Peeler came home with 'wheels in his head,' having spent most of his time in Washington at the Patent Office. and amid the bewildering maze of models he saw there, conceived a dozen or more inventions which he considered of far greater importance than the typewriter and he could not be induced to take up the work of perfecting his machine. He finally sold his remaining interest in the patent to Samuel Baxter of this city for \$1,000. Mr. Baxter and my brother spent quite a large amount trying to get the crude machine perfected but failed to do so and at last gave it up in despair. Mr. Baxter is still upon in this city. I called upon him the other day and saked him about the machine that Peeler made. He said he had it in his possession. I suggest that you write to him about it. He can give you all the formation obtainable as to this first invention of the typewriter. With best wishes, I am,

Yours very truly, G. W. CROSLEY.

In response to my letter to Mr. Baxter, that gentleman wrote:

Webster City, Iowa, July 30, 1906. Henry W. Roby, Esq.,

Dear Sir. Yours of the 24th came to hand in due time. I did not know much about Abner Peeler. He was here a few years. He moved away and I never saw him afterwards. I became financially interested in the typewriter through Mr. W. A. Crosley, a brother of Colonel Crosley, who bought an interest in the invention. He took Peeler to Washington and got the patent for him, with the agreement with Peeler that he was to develop and improve the machine, but after the patent was secured and he got some money, he lost all interest in the machine, so Mr. Crosley persuaded me to buy Peeler's interest. which I did. We took the machine to Chicago and had a duplicate made. We spent quite a little money trying to have the machine improved but we failed. Mr. Crosley had the duplicate machine. I don't know what became of it. I have the original (or what is left of it). For many years it has been stored in an out-building and is about all to pieces, . . . I am sorry I cannot give you a more full history of the Yours truly. subject.

SAMUEL BAXTER.

To show my readers further that I am not offering them some vague pipe dreams, as the writer of that article does. I wish to offer in conclusion of the controversy the signed statement of Peeler's own patent lawver, who did secure the patent for him. That lawyer is Colonel J. Clement Smith, who very fortunately for me is still living, and more fortunately still, is a resident of the city of Topeka, Kansas, which is my own home. Here is what Colonel Smith says about Peeler and his machine. I have in my possession his autograph letter to me, setting forth the facts.

Topeka, Kansas, August 4, 1905.

H. W. Roby, M. D., Dear Sir. No trequest I have read the foregoing article and find it incorrect in several statements. I am the attorney called "Col. Smith," in the clipping, who was associated with General N. P. Chipman, at Washington, D. C., in the practice of law in 1866 and 1still have distinct remembrance of Abner Peeler and his invention in means for imprinting type-shaped characters and figures on paper.

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Said invention consisted, I think, mainly in a series of hinged levers provided with pendant cords, each having a stirrup at its lower end, wherein the operator's fingers were placed to draw the levers downward and make the imprint. Only a vivid imagination would discern in it any traits resembling the Remineton tyroewiter.

The writer of the clipping is mistaken in his statement that the Patent Office refused to allow Mr. Peeler a patent for his device, for I secured such allowance without any serious difficulty and the patent was issued late in the summer of 1866. Mr. Peeler's apparatus was never adopted for actual use, so far as I have knowledge.

Truly yours,

I. CLEMENT SMITH.

So much for and from the three men still living who know best what Peeler actually did about and with his original machine and its one and sole duplicate. The original Peeler machine lies, a wreck, in an outbuilding in Webster City, Iowa, sleeping a race with the old Egyptian Sphinx, the Pyramids, the bones of Cheops, and the sacred bull, Apis, and it bids fair to outsleep them all. Now and then someone comes along and timidly raises a corner of the mantle of oblivion and takes a

peep at it and then goes away saying: "There lies a great treasure in archaeology!"

Had Peeler's invention held any element of practicability or coin value. it would never have been left to outsleep Rip Van Winkle or Caesar. It would have been on the market and competing with the Remington and all other good practical machines, especially if it were true that someone paid \$3,000 for the right to make and sell it. If it were not heralded far and wide as the best machine of all, it would still be proclaimed as one of the "just as good" and all the "nearly as good" machines, for all the "just as good" and all the "nearly as good" machines are on the market and making money, as well as many very inferior ones, but this "great machine" lies in that Webster City out-building, "unwept, unhonored, and unsung" by the business world. Peeler and his friends and his purchasers all went on through all the years that Mr. Sholes lived after he got his patent and allowed him and his associates and his successors to go on making thousands and thousands of machines without ever making any objection or any claim of infringement of their patent or any claim of interference before the Patent Office or any protest in the public prints or any appeal to the courts, but now, after thirty-eight years of silence, when Peeler lies in a drunkard's grave and Mr. Sholes has for fifteen years been hidden from the sight of men, some prowling graverobber, ashamed of his identity and afraid to give his name to the public, has the effrontery to make this false and foolish claim of Peeler's priority.

The government records in the Patent Office and the statement of Peeler's own attorney who obtained his patent for him and one of Peeler's partners, who are both still living, all contradict the claims of this anonymous writer. Was there ever a greater piece of humbug or a more silly falsehood? The statement that in June, 1866, no such thing as a machine that would write letters had ever been heard of, is as preposterous and false as that other hot-air proposition in the article, that Peeler invented a noiseless air gun which the Government forbade him to manufacture. Air guns have been in use since Marin invented one away back in 1595, but Marin's and all the other air guns ever seen were noisy affairs, while Peeler's was noiseless. It never was heard: it was only heard of. The Government heard of it and wiped it out as the most dangerous thing in the world, the only gun on the planet that was ever too dangerous for any possible human use!

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Will the fustian-monger who wrote that bombastic story please cite us to the record of that momentous government order of prohibition to Peeler? In a matter of such world-wide and momentous importance, that order should transcend all other records of the United States. Where is it? Echo answers "Where?" to the spurious claim of this spurious writer, who, in the face of all the facts and records, seems to say to the crowded planet:

Now let the whole world stand from under, I am a great gun; hear me thunder!"

Anyone desirous of pursuing this matter further will find, by consulting the Patent Office reports, that on the day that Pecler's patent was issued, August 14, 1866, a patent was also issued to Miller and Sholes, not for a typewriter, but for a shoe brush, and that, on November 13, 1866, Soulé and Sholes were granted a patent on a

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"numbering machine," and on April 30, 1867, Mr. Sholes was granted a patent on a "paging machine" (No. 64,375). On June 23, 1868, Sholes, Glidden, and Soulé were granted their first patent on the typewriter, No. 79,265, and their second patent on a typewriter was granted July 14, 1868, No. 79,868. By referring to Vol. IV of the Patent Office reports for 1868-69, pages 803 and 887, the cuts and illustrations of these will be found. while in Vol. III of the Patent Office reports for 1866-67, page 685, will be found the illustration of Peeler's machine, which is about as much like the Sholes machine as a wagon is like a steamhoat